SPECIAL PUBLICATION

NUMBER 2

OF

The Chicago Academy of Sciences

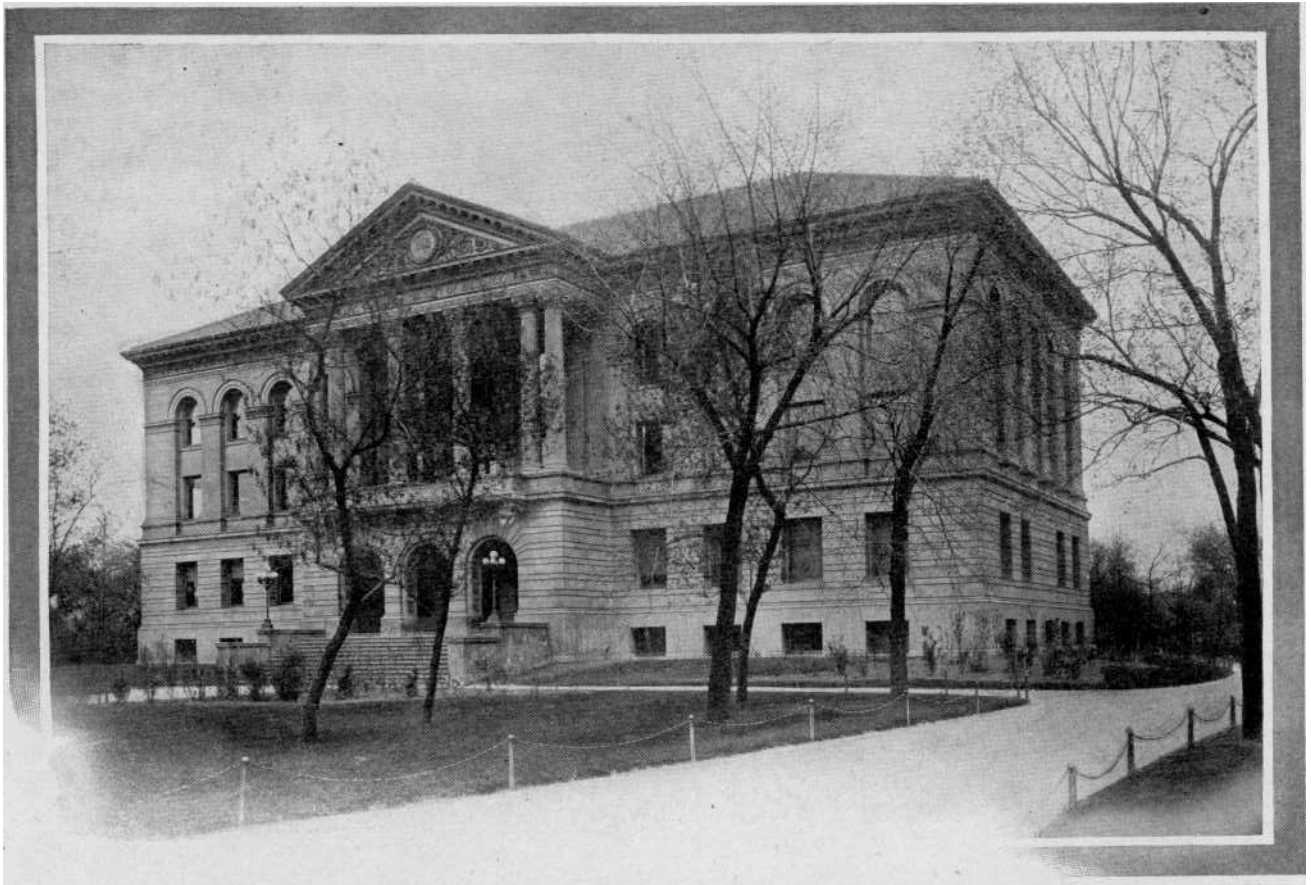
The Chicago Academy of Sciences: Its Past History and Present Collections

BY

FRANK COLLINS BAKER

Curator of The Chicago Academy of Sciences

ISSUED MAY I, I908



THE CHICAGO ACADEMY OF SCIENCES—MUSEUM BUILDING IN LINCOLN PARK.

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HISTORICAL SKETCH.*

The Chicago Academy of Sciences was organized January 13, 1857, under the name of "The Chicago Academy of Natural Sciences." In the year 1859 the society was incorporated under its present title, and in 1865 the charter now in operation was secured from the state legislature.

A small museum was first started in a room on the corner of Clark and Lake streets. In 1864 the collections had grown to such an extent that more commodious quarters were secured in the Metropolitan Block. Two years later the exhibits were seriously damaged by fire. The necessity for a fire-proof building being now apparent, a piece of property at 263 and 265 Wabash Avenue was purchased and in 1868 a fire-proof museum building was erected upon the rear of this lot, the street frontage being occupied by a two-story brick building, from which a yearly income from rentals was secured. The museum building was fifty feet wide, fifty-five feet deep and about fifty feet in height, and contained a basement, a ground story, and above this a museum hall with two galleries. The supposed fire-proof character of the museum, which was unique at that time among buildings of this kind, led many institutions, as well as individuals, to send large and valuable collections to the Academy. This was especially true of the Smithsonian Institution, which had loaned a vast amount of material for the use of Dr. William Stimpson, the director of the Academy.

On the ninth of October, 1871, the museum building with its contents was totally consumed in the conflagration which destroyed the greater portion of Chicago. It is estimated that not less than 300,000 specimens were stored in the building, many of them being priceless in value. The following notable collections were destroyed: The Bishoff and Western Union Telegraph Expedition of Alaska material; the Smithsonian collection of Crustacea, 10,000 jars, containing types of Dana, Stimpson and others; the invertebrates of the U. S. North Pacific Exploring Expedition, containing many undescribed types; the Stimpson collection of marine shells, numbering about 8,000 specimens, and the U. S. Coast Survey collection of deed sea Crustacea and mollusks, dredged in the

*The historical account is condensed from Mr. William K. Higley's paper, special publication No. 1, 1902.

Gulf Stream by Mr. M. Pourtales, loaned for description. In addition, the library, the manuscripts of Dr. Stimpson and almost the entire edition of the early transactions were destroyed.

The indomitable will which enabled the citizens of Chicago to rebuild the city almost before the embers were cool also controlled the members of the Academy, and a new set of buildings was erected on the burned site, and the lenders of the funds were secured by a mortgage on the property. The financial depression which followed the year 1873 reduced the income of the Academy to such an extent that it was not able to meet its obligations and, in 1886, by due process of law, the property was transferred to the holder of the mortgage.

The Academy then arranged with the Interstate Exposition, which was located on the ground now occupied by the Art Institute, to provide exhibition and storage rooms for its collections, where they remained until 1892 when the exposition building was taken down and the collections were placed in storage.

At this time a generous Chicago citizen, Mr. Matthew Laflin, offered to give $75,000 toward the erection of a building, and the Commissioners of Lincoln Park offered to provide the ground, as well as to add $25,000 to complete the fund for the building, and also to pay $5,000 per year towards the maintenance of the Academy. These offers were accepted and on October 31, 1894, the present building was opened to the public.

The museum building was designed by Patton and Fisher, architects, and is 132 feet long and 61 feet wide. It consists of a basement for work rooms and heating plant, a first floor for offices and library, a second floor for the museum, with a gallery constituting the third floor, and a large attic for storage purposes. The building is essentially fireproof, the only woodwork used in its construction being the floors, window frames and doors. The architecture is Italian renaissance and the material used is Bedford limestone.

In a survey of the history of the Academy three names stand out prominently: Mr. Robert Kennicott, its founder and first director; Dr. William Stimpson, the eminent zoologist and its second director, and Dr. J. W. Velie, for many years its curator.

SUMMARY OF COLLECTIONS.

The collections of the Academy are somewhat unevenly divided among the different subjects. The Mollusca is the most complete and contains about 8,000 species, including many types, cotypes

and other type material of Pilsbry, Walker, Sterki, Moellendorff, Baker and others. It is especially rich in American land and freshwater shells and in the Pulmonata of the Philippine Islands, embodied in the Quadras collection. The collection of Mollusca is also notably valuable for its extensive study series, illustrating the geographic range of a large majority of the American species.

The paleontological department is next in value, consisting of the Egan Paleozoic collection, the Britts collection of Missouri coal plants and the Arnold Pliocene collection. This department contains about 22,000 specimens, including a number of types and co-types. The mineral collection aggregates about 11,000 specimens, illustrating the majority of the subdivisions. The entomological collection contains upwards of 35,000 specimens, mostly American, and is especially rich in Coleoptera, there being about 4,000 species of this group. The ornithological department consists of 4,400 birds and 2,600 birds' eggs, the larger per cent. being American. A number of rare species are contained in the collection. The botanical collection is almost wholly local, and consists of about 8,000 mounted plants. The lower invertebrates, as well as the other orders of the vertebrates, consist of small collections of a more or less local nature.

The skeleton of the mammoth, Elephas columbi, is about 50 per cent. original, and is the only restored specimen of this species on exhibition at the present time. It was collected in Spokane County, Washington.

A notable feature of the Academy's collections is the material gathered by the Natural History Survey, illustrating the local fauna, flora and geology. This material aggregates about 15,000 specimens, mostly with very carefully prepared data. The following exhibits of local faunas have been prepared: Mollusca, mineralogy, lithology, paleontology, land birds.

The library contains upwards of 27,000 books and pamphlets, consisting of the transactions and proceedings of scientific societies, of which about 600 are represented.

DIRECTORY OF THE MUSEUM.

The collections are arranged in a progressive manner from lower to higher. Beginning in the north end of the gallery the visitor may examine first the minerals, then the rocks, followed by dynamic geology and paleontology; zoology follows, and the groups Protozoa, Porifera, Coelenterata, Vermes, Echinodermata, Mol-

lusca and Arthropods are arranged in their proper sequence. Descending to the main floor the vertebrates begin with the fishes at the northeast end and terminate with the primates at the southeast end. The arrangement is largely taxonomic and aims to present nature in orderly succession, from simple to complex. It will be noted that many of the exhibits are of an ecological character.

The collections may be thus grouped by numbered cases:

GALLERY.

Mineralogy.

1-2, Gems and gem minerals; 3, crystallography; 4, mineral morphology; 5-17, systematic mineralogy; 18, Chicago minerals; 19, radioactivity, chemical mineralogy.

Lithology.

19, Rock morphology; 20-23, systematic rock collection; 23, Chicago rocks.

Economic Geology.

24, Building stones, abrasives; 25-26, useful metals and minerals.

Geologic Processes.

27-31, The work of the atmosphere, water, ice, vulcanism, etc.

Paleontology.

32, Introductory exhibit; 33-34, large specimens; 35-66, general collection arranged historically from Cambrian to Pleistocene; 67-70, local paleontology of the Niagaran limestone.

Lower Invertebrates.

71, Protozoa; 72, Porifera (sponges); 73-74, 83-84, 101-102, Coelenterata (corals); 75, Vermes, Brachiopoda, etc.; 76-78, Echinodermata; 131-133, Crustacea; 136-138, Arachnida; 134-136, synoptic collection of invertebrates.

Mollusca.

79-80, Pelecypod morphology; 81-82, 85-93 , Pelecypoda; 94, 122, gastropod morphology; 95-100, 103-108, 122-129, Gastropoda, mostly marine; 109-110, 113-116, Pulmonata; 111-112, button industry; 117-120, local Mollusca; 121, abnormalities; 122, 130, economic use.

Insecta.

139-145, 147-153, Coleoptera; 146, Diptera; 154-156, Lepidoptera; 157, Odonata, etc.; 157-160, Hemiptera, etc.; 160-161, Orthoptera; 162-163, injurious insects; 163, household pests, silkworm culture; 164, mimicry, protective coloration, sex dimorphism, etc.

MAIN FLOOR.

Mollusca.

167, Cephalopod evolution, morphology. etc.

Lower Vertebrates.

168-177, Fishes; 178, batrachians; 178-181, 185-190, reptiles.

Aves.

182-184, Lower birds, diving birds; 191-193, long-winged swimmers, etc.; 194-200, lamellirostal swimmers; 201-205, waders; 204-207, shore birds; 208-209, gallinaceous birds; 210, doves, etc.; 210-213, birds of prey; 214, woodpeckers, etc.; 215-226, Passeres; 227-229, pheasants; 230, European birds; 231, birds of Mexico; 232, South American birds; 233, Australian birds; 234, albinism; 235-238, avian morphology, 290-295, local birds; 296, flamingoes; 297, cormorant.

Mammals.

239-280, Arranged from edentates to primates.

Ecological Exhibit.

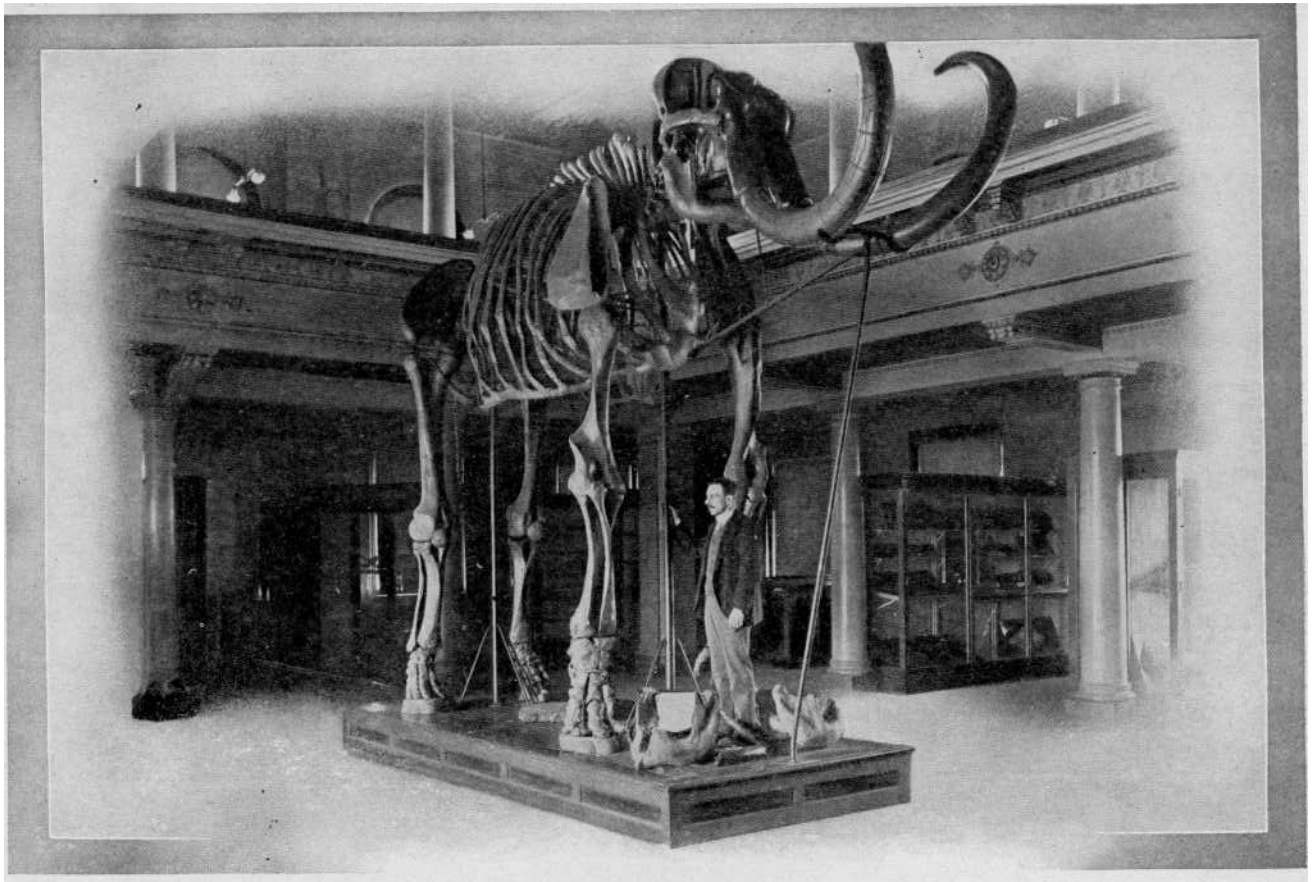
281-283, The animal and its environment.

Large Group Cases.

284, Musk ox; 285, Alaskan moose; 286, peccary; 287, Virginia deer in fall courtship; 288, Lapland reindeer; 289, model of Chicago drainage canal; 298, mammoth skeleton.

ENTRANCE HALL.

299, Mexican mountain sheep; 300, albino bison skin; 301-302, collection of large mammal heads; 303-305, relief maps of the Chicago area; casts of extinct vertebrates above cornice.



SKELETON OF AMERICAN MAMMOTH, ELEPHAS COLUMBI.
Height 13 feet.